

REMARKS

Claims 1-15 are pending in the present application.

Entry of the above amendments is earnestly solicited.  
An early and favorable first action on the merits is earnestly requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

5. The actuator, as claimed in claims ~~1~~ and 4, characterized by a position sensor (7) made with a resistor (10), normally of the linear type.

6. The actuator, as claimed in claims ~~1~~ and 4, characterized by a position sensor (7) made with a capacitive group.

7. The actuator, as claimed in claims ~~1~~ and 4, characterized by a position sensor (7) made with a group that measures the inductance of solenoid (1) upon the variation of the position of the ferromagnetic nucleus (2).

9. The actuator, as claimed in claims ~~1~~ and 8, characterized by a rod (3) combined with a spring (8) capable of pushing the ferromagnetic nucleus (2) to its resting position.

15. The actuator, as claimed in claims ~~1~~ to 14, characterized by flange type means (11) for its anchoring on the turbocharger (5).

## ABSTRACT

An actuator composed of: a) a solenoid (1) with ferromagnetic nucleus (2) which slides inside it and is combined with a rod (3) appropriate for interacting with the turbocharger's (5) pilot point (4) and provided with a sensing system (7) of the position of the ferromagnetic nucleus (2) in the solenoid (1); b) and an electronic circuit which: - on the way in receives at least the signal from the engine's electronic control unit and the feedback signal, connected to the position of the ferromagnetic nucleus (2) of the solenoid (1); - on the way out it distributes the electric current, connected to the entry signals, with which it feeds the same solenoid (1).